

1044b UIC - EAST POPLAR OIL FIELD  
ENFORCEMENT CASE SDWA 1431  
Folder ID: 13622 1969 Privileged

Release in full

Region 8



13622

## HISTORY

HUBER NO. 2



HUBER NO. 2

SUMMARY OF WELL HISTORY

WELL NAME & NUMBER:	Huber No. 2
LOCATION:	1980' from North line & 1980' from East Line SW NE Section 10, T28N, R
WORKING INTEREST:	.6477080%
REVENUE INTEREST:	.5359784%
ELEVATION:	2098'
SPUDDED:	May 23, 1952
COMPLETED:	July 2, 1952
TOTAL DEPTH:	5782'
CASING:	10-3/4" 35 & 45#, 8rd., set at 1005 with 450 sks cmt. 7" 23#, 8rd. set @ 5776' with 300 s. HOWCO
TUBING:	2-3/8" 4#, 8rd., E.U.E. set @ 5680'
PRODUCING:	Charles B-1 5618'-26' B-2 5635'-52' Madison C 5776'-82'
ACID:	July 11, 1952 500 gallons 5618'38' Dowell

PERMIT  
APPLICATIONS

(SUBMIT IN QUADRUPLICATE)  
TO

NOTICE  
THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA  
BILLINGS OR SHELBY

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	X
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

May 5, 1969

Following is a ~~notice of intention to do work~~ report of work done on land ~~= owned -~~ leased described as follows:

LEASE Huber

MONTANA  
(State)

Roosevelt  
(County)

East Poplar  
(Field)

Well No. 1 SE NE 10 28N 51E  
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. from ~~N~~ line and 660 ft. from ~~E~~ line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2100

READ CAREFULLY

DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK  
RESULT

SEE ATTACHED

Approved subject to conditions on reverse of form

Date

By District Office Agent Title

Company E. A. Polumbus, Jr.

By

Title Vice-president Exploitation

Address 220 C.A. Johnson Building

Denver, Colorado 80202

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

REPORTER PRY. & SUPPLY CO.

COMMISSION USE ONLY  
API WELL NUMBER

2	5								
STATE	COUNTY	WELL							

(SUBMIT IN QUADRUPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA  
BILLINGS OR SHELBY

NOTE  
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PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.

## SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement	X	Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

May 28, 1969

Following is a ~~notice of intention to do work~~ ~~report of work done~~ on land ~~owned~~ ~~leased~~ described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)  
Well No. 2 SW NE Section 10 28N 51E  
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. from  $\frac{N}{=B=}$  line and 1980 ft. from  $\frac{E}{=W=}$  line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2098

READ CAREFULLY

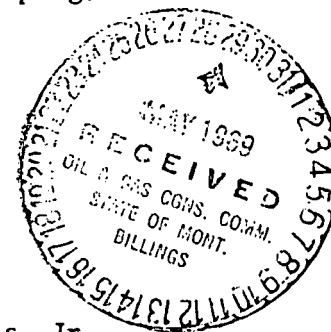
## DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK  
RESULT

1. Pull rods, pump and tubing.
2. Set bridge plug on wire line at 4975'. Dump sack of cement on plug.
3. Perforate Heath sand 4887-4892' with 1 hole per foot.
4. Frac or acidize if necessary.
5. Run tubing, rods and pump.
6. Test on pump.



Approved subject to conditions on reverse of form

MAY 29 1969

Date ORIGINAL SIGNED BY

By Judson D. Sweet, Petroleum Engineer

Title

District Office Agent

Company E. A. Columbus, Jr.

By J. J. Law

Title Vice President - Exploitation

Address 220 C. A. Johnson Building  
Denver, Colorado 80202

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

HCKEE



(SUBMIT IN QUADRUPPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA  
BILLINGS OR SHELBY

SUNDRY NOTICES AND REPORT OF WELLS

NOTICE

THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	
Notice of Change of Operator	X		

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

August 8, 1986

Following is a ~~notice of intention to do work~~ ~~report of work done~~ on land ~~owned~~ leased described as follows:

LEASE HUBER

MONTANA  
(State)

Roosevelt  
(County)

East Poplar  
(Field)

Well No. 2 10 28N 51E Principal  
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. from N line and 1980 ft. from E line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is

READ CAREFULLY

DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK  
RESULT

Notification of sale of above described property, effective 7-1-86, resulting in a change of Operator.

CERTIFIED BY: GRACE PETROLEUM CORPORATION

By: Kay Fully  
Title Supervisor  
Production Accounting

Approved subject to conditions on reverse of form

Date SEP 15 1986

ORIGINAL SIGNED BY

By Doc Rickman, Executive Secretary  
District Office Agent Title

Company Murphy Oil, U.S.A., Inc.

By A. F. Johnson

Title Manager of Production Department  
200 Peach St.

Address El Dorado, AR 71730

COMMISSION USE ONLY  
API WELL NUMBER

25 085 051037  
STATE COUNTY WELL

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate  
WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL.

OVER

4

Submit In Quadruplicate To:  
**Montana Board of Oil and Gas Conservation**  
1520 East Sixth Avenue  
Helena, Montana 59620-2301

ARM 36.22.307  
ARM 36.22.605  
ARM 36.22.1308

### Notice of Intent to Change Operator

The undersigned Transferor hereby notifies the Board of Oil and Gas Conservation of its intention to transfer ownership and/or operation of the following wells to the undersigned Transferee:

Lease Name:  
Huber

Lease type: (Private, State, Federal, Indian)  
Private

County:  
Roosevelt

Field name:  
East Poplar

Description of wells: (Include official well name and number as reflected on Board of Oil & Gas Conservation records, API well number, and exact location of the well including quarter-quarter section, footage measurements, Section, Township, and Range.)

Huber No. 1, Huber No. 2, Huber No. 3, Huber No. 4-A, and Huber No. 5-D  
See attached sheet for information  
Effective \_\_\_\_\_ change of owner/operator from Murphy Exploration  
and Production Company to \_\_\_\_\_

#### Transferor's Statement:

I hereby designate the Transferee named herein as the owner and/or operator of record of the above described well(s). I acknowledge that the Transferor continues to be responsible for said well(s) and all associated equipment and facilities until such time as this transfer is approved by of the Montana Board of Oil and Gas Conservation. I certify that the information contained herein is true and correct:

Company Murphy EXPRO  
Street Address 131 South Robertson Street  
P.O. Box Box 61780  
City, State, ZIP New Orleans, LA 70161-9969  
Signed \_\_\_\_\_  
Print Name Sidney W. Campbell  
Title Manager Onshore Operations  
Telephone ( 504 ) 561-2594

#### Transferee's Statement:

I hereby accept the designation of operator/owner for the above described well(s). I understand that this transfer will not be approved until the Transferee has complied with the Board's bonding requirements. I acknowledge that under Section 82-11-101 MCA, the Transferee herein is responsible for the costs of proper plugging and restoration of the surface of the well(s) described above. I certify that the information contained herein is true and correct:

Company \_\_\_\_\_  
Street Address \_\_\_\_\_  
P.O. Box \_\_\_\_\_  
City, State, ZIP \_\_\_\_\_  
Signed \_\_\_\_\_  
Print Name \_\_\_\_\_  
Title \_\_\_\_\_  
Telephone ( )

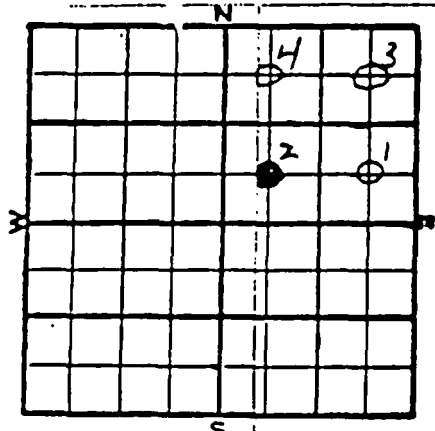
#### BOARD USE ONLY

Approved \_\_\_\_\_  
Date \_\_\_\_\_  
Name \_\_\_\_\_ Title \_\_\_\_\_  
Oper. No. \_\_\_\_\_ Bond No. \_\_\_\_\_

Field Office Review	Date	Initial
Inspection	_____	_____
Records Review	_____	_____
Operations	_____	_____
Oper. No.	Bond No.	

GEOLOGICAL DATA





BOARD OF RAILROAD COMMISSIONERS OF THE STATE OF MONTANA

Paul T. Smith, Chairman  
Austin B. Middleton, Commissioner      Leonard C. Young, Commissioner  
OIL AND GAS WELL DIVISION

LOG OF OIL OR GAS WELL

Company C. C. Thomas Address Denver, Colorado  
Lessor or Tract Haber Field K. Poplar State Montana  
Well No. 2 Sec. 10 T. 28 R. 51 Meridian East County Beauregard  
Location 1980 ft. { N. } of North Line and 1980 ft. { E. } Elevation 2098  
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Date Aug. 3, 1952  
Signed Robert D. Snyder  
Title Petroleum Engineer  
Address Billings, Mont.

The summary on this page is for the condition of the well at above date.  
Commenced drilling 5-23 19 52 Finished drilling 5-23 19 52

Oil or Gas Sands or Zones (Denote gas by G)				Important Water Sands			
No. 1, from	<u>5617</u>	to	<u>26</u>	No. 1, from		to	
No. 2, from	<u>5634</u>	to	<u>48</u>	No. 2, from		to	
No. 3, from	<u>5778</u>	to	<u>82 total depth</u>	No. 3, from		to	
No. 4, from		to		No. 4, from		to	
No. 5, from		to		No. 5, from		to	

CASING RECORD

Size Casing	Weight per Foot	Threads Per Inch	Make	Amount	Kind of Shoe	Cut & Pulled From	Perforated		Purpose
							From	To	
				<u>3 jet shots/ft</u>			<u>5616</u>	<u>5620</u>	<u>B<sub>1</sub> Zone</u>
				<u>3 jet shots/ft</u>			<u>5630</u>	<u>5634</u>	<u>B<sub>2</sub> Zone</u>
<u>Acidized with 400 gal thru perforations</u>									
<u>Model "D" Baker Production Packer at 5660'; B Zone</u>									
<u>Producing thru casing, B Zone producing thru tubing.</u>									

CASING OR TOOLS LOST OR SIDETRACKED

From	to	Description
From	to	Description
From	to	Description

MUDDING AND CEMENTING RECORD

Casing Size	Where Set	Number Sacks of Cement	Methods Used	Mud Gravity	Amount of Mud Used
<u>10 3/4</u>	<u>1005</u>	<u>450</u>	<u>Halliburton</u>		
<u>7"</u>	<u>5776</u>	<u>300</u>	<u>Halliburton</u>		

PLUGS AND ADAPTERS

Heaving plug—Material	Length	Depth Set
<u>Cement</u>	<u>2500</u>	
Adapters—Material	Size	
<u>1 1/2" x 2 1/2"</u>	<u>2 1/2"</u>	
<u>1 1/2" x 2 1/2"</u>	<u>2 1/2"</u>	

SHOOTING RECORD

W. 3.77 Slap Time	Shell Used	Explosive Used	Quantity	Date	Depth Shot	Depth Cleaned Out
2:00:11.70		1220				
02:21:17.00		1100				
02:40:17.00		1315				
02:41		1300				
02:44:04		1002				
02:45		2351				

SAM 394

No. 2, from.....to.....  
No. 3, from.....to.....  
No. 4, from.....to.....  
No. 5, from.....to.....

CASING RECORD

Size Casing	Weight per Foot	Threads Per Inch	Make	Amount	Kind of Shoe	Cut & Picked From	Perforated		Purpose
							From	To	
				3 jet shots/ft			5616	5620	B <sub>1</sub> Zone
				3 jet shots/ft			5630	5634	B <sub>2</sub> Zone
Acidised with 400 gal thru perforations									
Model "D" Baker Production Packer at 5660'; B Zone									
Producing thru casing, C Zone producing thru tubing.									

CASING OR TOOLS LOST OR SIDETRACKED

From.....to.....Description.....  
From.....to.....Description.....  
From.....to.....Description.....

MUDDING AND CEMENTING RECORD

Casing Size	Where Set	Number Bags of Cement	Methods Used	Mud Gravity	Amount of Mud Used
10 3/4	1005	450	Halliburton		
7"	5776	300	Halliburton		

1005' to 5776'

PLUGS AND ADAPTERS

Heaving plug—Material.....Length.....Depth Set.....  
Adapter—Material.....Size.....

SHOOTING RECORD

Size	Shell Used	Explosive Used	Quantity	Date	Depth Shot	Depth Cleaned Out
2 1/2"	1300	1300				
2 1/2"	1300	1300				
2 1/2"	1300	1300				
2 1/2"	1300	1300				
2 1/2"	1300	1300				
2 1/2"	1300	1300				
2 1/2"	1300	1300				

TOOLS USED

Rotary tools were used from.....feet to.....feet, and from.....feet to.....feet  
Cable tools were used from.....feet to.....feet, and from.....feet to.....feet

DATES

Put to producing.....  
The production for the first 24 hours was.....barrels of fluid of which.....% was oil;.....% emulsion;

% water; and.....% sediment.  
If gas well, cu. ft. per 24 hours.....(lock pressure, lbs. per sq. in.)

Gallons gasoline per 1,000 cu. ft. of gas.....

SAM 393

EMPLOYEES

J. Burns.....Driller.....  
D. Nelson.....Driller.....

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "side-tracked" or left in the well, give size and location. If the well has been dynamited, give date, size, position, and number of shots. If plug or bridge were put in to test for water, state kind of material used, position, and results of pumping or balling.

FORMATION RECORD

From	To	Total Feet	Formation
1821	1821	32	Shale
1830	1821	71	Shale
1830	1821	81	Shale
1830	1821	10	Shale
1830	1821	170	Shale
1830	1821	2888	Shale
1830	1821	81	Shale and shells
1830	1821	171	Shale
1830	1821	29	Sdy lime and sand
1830	1821	91	Shale w/sdy strk
1830	1821	116	Shale and ssp

[illegible]

HUBER NO. 2

COMPLETION DATA

5-26-52 . HOWCO cemented surface at 1005' with 450 sacks of  
Quixtrench (Ideal)

6-30-52 HOWCO cemented production string at 5776' with 300  
sacks regular (Ideal 30' left in).

7-11-52 500 gallons Dowell at 5618'-5638' flush 33 barrels  
down casing.

7-08-52 McCullough Glass Jet 5622'-5618' 3/ft.  
34 holes,  $\frac{1}{2}$ " dia 5632'-5637' 3/ft

Tubing 13' stringer                      2 tubing seal nipples  
   1 tubing seal nipple locator  
   1 10' x 2" NU 10 rd. perf.  
   prod tube

Baker safety jt., 1 jt. above packer.

## WELL RECORD

APPROP. NO. \_\_\_\_\_ TITLE NO. \_\_\_\_\_ LEASE NAME Albert Huber WELL NO. \_\_\_\_\_  
 DESCRIPTION: T28N, R51E, S4NE, Sec. 10.  
 LOCATION: 1980' S. North Line, 1980' W East Line, Sec. 10  
 RIG CONTRACTOR \_\_\_\_\_ DRILLING CONTRACTOR M.R. Wagner Drilling Co.  
 DRILLING: COMMENCED 5/23/52 COMPLETED 7/2/52 COMMENCED PRODUCING 7/2/52  
 ROTARY TOOLS USED: FROM 0 TO 5782 CABLE TOOLS USED: FROM \_\_\_\_\_ TO \_\_\_\_\_ FUEL: KIND \_\_\_\_\_

## CASING-LINER-SCREEN-TUBING RECORD

SIZE	O.D. I.D.	WEIGHT	THRD.	MAKE-KIND	LFWLD SHLBS	NEW S.W.	SET AT	PULLED OUT		LEFT IN		CEMENTING RECO		
								OVER-ALL TALLY FEET	IN.	OVER-ALL TALLY FEET	IN.	NO. SACKS	KIND	CEME
10-3/4	od	35 1/4	8 rd		smls	sh	1005					450		HOW
7"	od	23	8 rd		smls	new	5776					300		HOW
2-3/8EUS	od	4	8 rd		smls		5680							

CASING-LINER-TUBING: PERFORATED-FROM 5618 TO 5620 METHOD, ETC. 3 jet shots/foot  
 CASING-LINER-TUBING: PERFORATED-FROM 5630 TO 5624 METHOD, ETC. 3 jet shots/foot  
 PACKER: SET AT 5660 SIZE AND KIND Baker Model "D"-4 7"

## PRODUCING HORIZON FORMATION RECORD

ELEVATION		NAME OF FORMATION	TOP	BOTTOM	REMARKS
GROUND	DERRICK FLOOR				
	2098		5617	5624	Charles B-1
			5634	5648	Charles B-2
			5778	5782	Madison C
TOTAL DEPTH OF WELL		5782			

## INITIAL PRODUCTION RECORD

DATE	SIZE OF CHOKE	FLOWING PRESSURE		TEST DATA				METHOD OF PRODUCING	REMARKS
		TUBING	CASING	HRS.-MIN.	BSLS. OIL	GAS VOLUME	WATER		
7/14/52	8/64	400	500	24	250	--	--	flow	B1 & B2 casing flow
7/14/52	8/64	400		24	100	--	--	flow	C tubing flow
POTENTIAL: 24 hrs. NATURAL _____ BSLS. OIL _____ BSLS. % WATER. AFTER SHOT-ACID <u>600</u> BSLS. OIL _____ BSLS. % WATER									
0 - 240 15/64 choke									

## SHOT OR ACIDIZING RECORDS

DATE	KIND	QTS.	GAL.	FROM	TO	SIZE OF SHELL	ANCHOR OR BLANKET	SHOT BY (CO.)
7/11/52	X		500	5618	5638			Dowell

## CLEANING OUT-PLUGGING BACK-DEEPENING RECORDS

AUTH. NO.	DATE COMMENCED	DATE COMPLETED	FROM	TO	PRODUCTION BEFORE		PRODUCTION AFTER		SEE DAILY RE FOR OTHER DE
					OIL	WATER	OIL	WATER	



BILLINGS CORE-LAB  
5 North 25th St.  
Billings, Montana

Lab. No. 1065

CORE ANALYSIS REPORT

Field	East Poplar	County	Roosevelt	State	Montana
Well No.	2 Thomas-Huber	Location	C SW NE 10-28N-51E		
Formation	Charles B1 & B2	Depths	5620-5642'		
Operator	C. C. Thomas			Date	6-25-52

Laboratory Data

Sample No.	Depth Feet	Porosity Percent	Permeability Millidarcies	Saturation, % Residual Oil	Pore Space Water	Remarks
Core #2						
Charles B1						
1	5620-21	9.7	9.1	19.8	41.6	Vertical Fractures (close
2	5621-22	10.8	5.0	18.5	22.2	
3.	5622-23	13.9	5.8	17.2	40.9	
4	5623-24	15.2	2.1	24.4	45.1	
5	5624-25	12.1	5.9	20.0	72.9	Some Coral
6	5625-26	10.8	0.1	26.1	56.5	
Charles B2						
7	5636-37	16.2	11	11.4	51.4	Some Coral
8	5637-38	11.6	1.6	13.7	45.8	
9	5638-39	12.6	2.1	10.9	74.5	
10	5639-40	7.6	0.1	2.9	84.2	
11	5640-41	8.4	-0.1	8.0	75.4	
12	5641-42	5.2	-0.1	4.2	84.6	

SUMMARY

<u>Depth</u>	<u>Interval</u>	<u>Porosity</u>	<u>Permeability</u>	<u>Oil</u>	<u>Water</u>
5620-5626'	6 ft.	12.1	4.8	21.0	46.5
5636-5639'	3 ft.	13.5	4.9	12.0	57.2
5639-5642'	3 ft.	7.1	-0.1	5.0	81.4

Charles B1 has low permeabilities and is oil saturated. Charles B2, the upper 3 feet has low permeabilities and a lower oil-water ratio than B1 but appears to be an oil bearing section. Below this section the permeabilities drop off to practically nothing. The oil content decreased and the water content increased indicating a water zone.

BILLINGS CORE - LAB  
5 North 25th St.  
BILLINGS, MONTANA

CORE ANALYSIS REPORT

Lab. No. 1065

FIELD	East Poplar	COUNTY	Roosevelt	STATE	Montana
WELL NO.	2 Thomas- Huber	LOCATION	C SW NE 10-28N-51E		
FORMATION	Charles B1 & B2	DEPTHS	5620-5642'		
OPERATOR	C.C. Thomas			DATE	7-7-52

WELL AND CORE DATE

ELEVATION, ft. 2095' RB  
DRILLING MUD

TOTAL DEPTH, ft. 5782  
COMPLETION DEPTH, ft.

FORMATION ANALYZED

INTERVALS, ft.

Charles B1  
Charles B2

5620-5626' 6'  
5636-5642' 6'

CORES ANALYZED

Footages  
Number of Samples

5620-5642'  
12

SAMPLING DATA

Sampled by  
Duplicate Samples Retained

Robert D. Snyder  
by Billings Core-Lab

TYPE OF LABORATORY ANALYSIS

Oil and Water Saturation  
Porosity  
Permeability to Air  
Connate Water  
Liquid Permeability  
15% Acid Solubilities  
Mud Acid Solubilities  
Vertical Permeabilities to Air

X  
X  
X

Analyzed by John G. Yapuncich

BILLINGS CORE - LAB  
5 North 25th St.  
BILLINGS, MONTANA

CORE ANALYSIS REPORT

Lab. No. 1065

FIELD East Poplar  
WELL NO. 2 Thomas-Huber  
OPERATOR C. C. Thomas

COUNTY Roosevelt  
LOCATION C SW NE 10-28N-51E

STATE Montana

DATE 7-7-52

ESTIMATED OIL RECOVERY

SUMMARY OF CORE DATA

Average Porosity, %	12.6
Average Permeability, millidarcies	4.8
Average Residual Oil Saturation, % pore space	18.0
Average Water Saturation, % pore space	50.1
Average Connate Water, % pore space	35.0 (est.)
Total Footage	9

WELL AND CRUDE OIL DATA

Formation Volume Factor	
Shrinkage	0.9 (est.)
Gas@Oil Ratio, Cu.Ft. per bbl. stock tank oil	
Degrees API Gravity @ 60° F	
Bottom Hole Pressure @ _____ ft., lbs.	
Bottom Hole Temperature @ _____ ft. ° F	
Elevation, ft.	2095 RB
Formation	Charles Bl & B 2

VOLUMETRIC DATA

Pore Space per acre-foot, barrels	978
Connate Water per acre-foot, barrels	342
Reservoir Oil per acre-foot, barrels	636
Stock Tank Oil per acre-foot, barrels	572

ESTIMATED OIL RECOVERY

Barrels per acre-foot	342
Barrels per acre	3078

REMARKS: An effective water drive was assumed for the above calculations. Assuming a drainage area of 40 acres then possibly 123,120 barrels of oil could be recovered. If the pay is thicker than shown by the laboratory samples then the oil recovery will be correspondingly greater.

HUBERT #2

FIELD  
East Poplar

DATE

☐ PRESENT COMPLETION☐ SUGGESTED COMPLETION☐ ORIGINAL COMPLETION

WELL CLASS

PERMANENT WELL  
BORE DATA

DATA ON THIS COMPLETION

SW NW Sec. 10, T28N, R51E

East Poplar Field

Roosevelt County, Montana

TO 5782'

KB 2089'

GL 2078'

Dakota Treatment:

\* Fraced w/ 505 BBL w-F10  
+ 10,000' 20/40 sand

\* Initial injection

1400 BWPB @ 770'

\* (5/8/72) Acidized w/

7000 gal 7 1/2% Injection

after treatment 2650 BWPB

@ 960'

\* No record of upper  
parker but states

two strings were

used at one time

(both 2" string are

production and the

other injection)

\* Pulled 2" Dakota

string in 1973 after

converting EPU - 110 XD

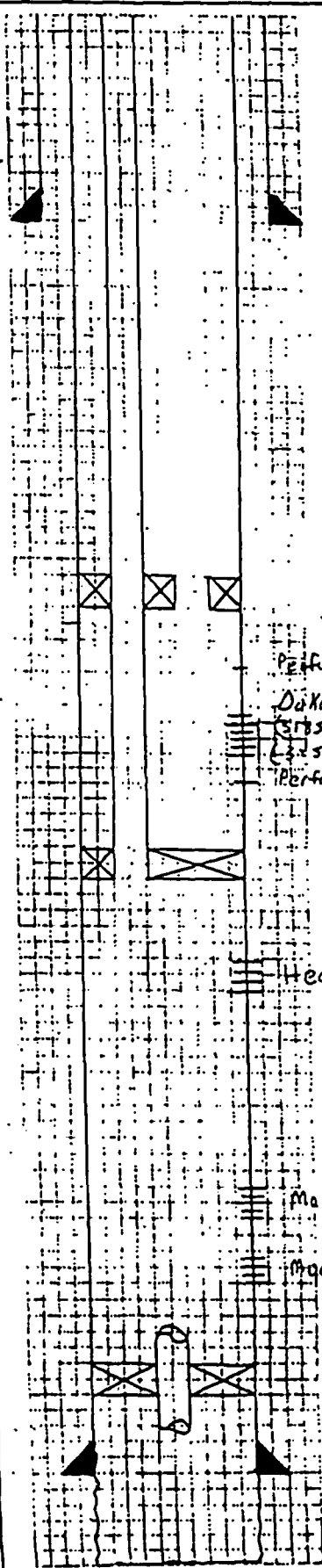
to WDW in 1973

\* No records of

production being

pulled since it

was run.



10 3/4" @ 1006' w/ 450 SX

Perfor 8 holes @ 3150' + 3022' w/ 170 SXs.

Dakota (5/72)

(5185 - 3230')

(3250 - 3325')

Perfor 4 holes @ 3350' + 3022' w/ 30 SXs.

Baker Model @ 3410'

Heath (4884-89') (6/4/69)

Completed Madison (7/52)

Madison B-1" (5618-76')

Madison B-2" (5635-52')

Baker Model D" @ 5660'

7" @ 5776' w/ 300 SX

"C" zone open hole  
(5776 - 82')

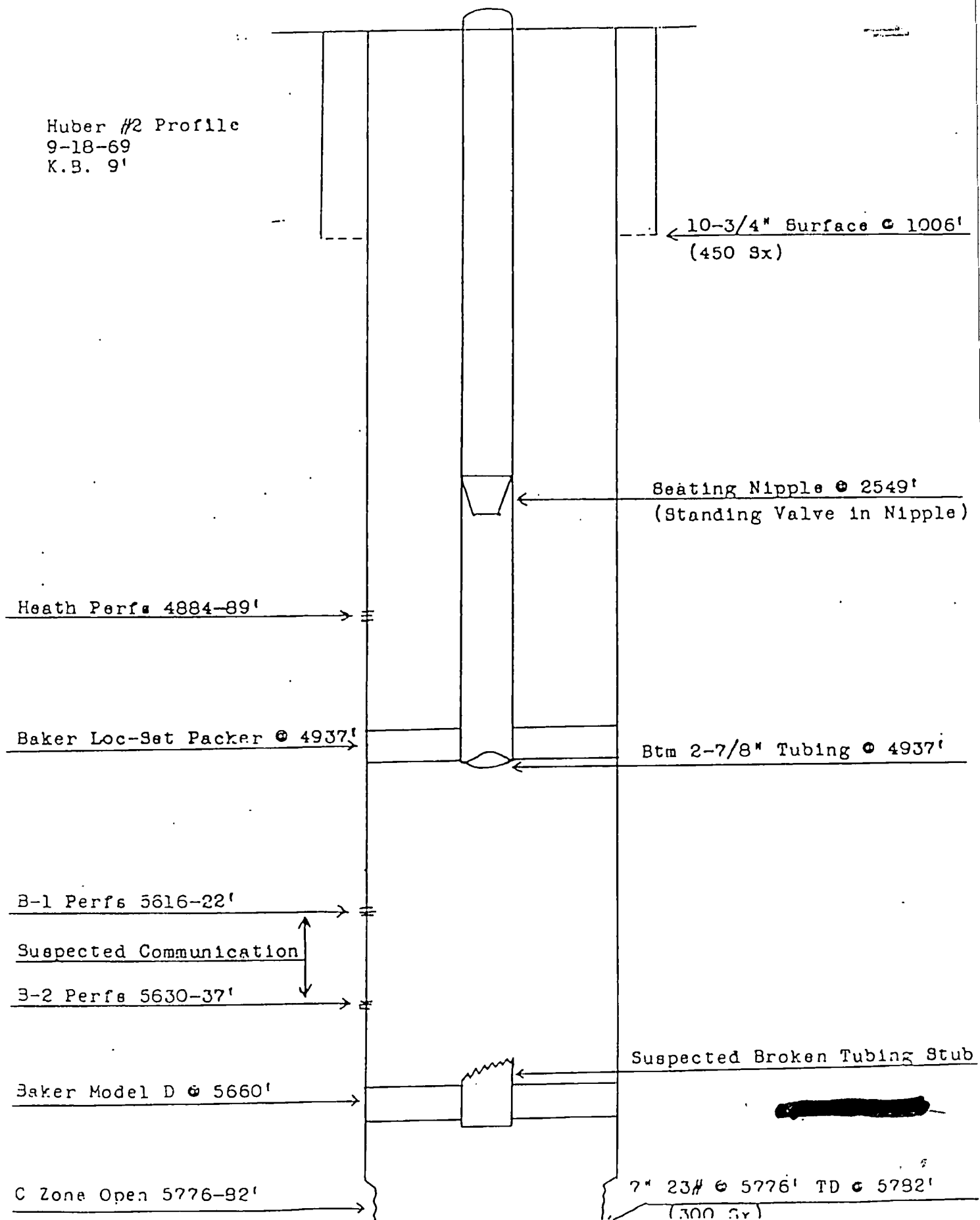
SERVICE & TESTING

HUBER NO. 2

WORKOVER HISTORY NO. 1

- 6-2-69 Rig up Big Chief Well Service Rig. Pull rods and tubing.
- 6-3-69 Rig up Perf-O-Log, run Gamma Ray - Neutron. Run Bond Log. Set Halliburton Speed-E-Line Drillable Bridge Plug. Dump 1 sack cement on B.P.
- 6-4-89 Perforate 4884'-89' 1 shot/ft. DML Casing gun, 19 g. Start in with J-55 & N-80 tubing. Start rig up to swab. 2 runs (water) packer gave out. Probably warmed up and took strain off packer. Try to re-set packer, set with 14,000 tension. Packer still not holding, proceed to swab casing down.
- 6-5-69 Hole full 500# pressure on tubing. Well flowed water one hour commence swabbing, swabbing water. Water chlorides 27,000. Cannot swab down any further than 1800'. Swabbing 20/bbls per hour 100% water, trace oil. Rigging up to run rods and pump. Well hung on and pressure tested, released rig.

Huber #2 Profile  
9-18-69  
K.B. 9'



HUBER NO. 2

WORKOVER HISTORY NO. 3

Lease and Well No. Huber No. 2

Field: East Poplar County: Roosevelt State: Montana

Well Location: SW NW Section 10, T28N, R51E

STATUS PRIOR TO PRESENT JOB:

Date of Last Workover: June 2, 1969 T.D. 5782 PBTD: 4975

Producing Zone: Heath Sand Perforations: 4884'-89'

Latest Test: Pumping 2 BOPD 180 BWPD.

JUSTIFICATION FOR WORKOVER:

Well not commercial, recomplete in Madison Lime.

SUMMARY OF WORKOVER:

9-16-69 Moved Signal Rig 2 in. Pulled rods and tubing and removed Baker Lok-Set packer. Went back in with 6-1/4" bit to drill out bridge plug. Rigged up drilling equipment.

9-17-69 Drilling on bridge plug.

9-18-69 Finished drilling out bridge plug, ran tubing and rods back and put on pump.

Recap of Workover:

Final perforations: 4884'-89' (Packed Off), 5616'-22', 5630'-37', 5775'-82' (Open hole)

Final PBTD: 5782 T.D.

Initial Potential: 10 BOPD 840 BWPD.

Geological Name of Producing Zone: B-1, B-2 and C Zone of Madison Formation

Results of Workover: Madison Formation back on production with Heath Zone open to annulus to flow off accumulated load oil.



KB 9.00

HUBER 2

9-18-69

10 3/4 Surface @ 1806' 450 SX

← Seating Shoe at 2549 KB

← 2 7/8" Tubing 4937' KB

Heath Perf. 4884-89 KB →

← Baker Loc-Set @ 4937 KB

B-1 Perf. 5616-22 KB →

← Suspected Communication

B-2 Perf 5630-37 KB →

← Suspected broken Tubing Stub

← Baker Model D @ 5660' KB

C Zone Open 5776-82 KB →

← 7" 23# @ 5776 KB

300 SX

HUBER NO. 2

WORKOVER HISTORY NO. 4

Lease and Well No.: Huber No. 2

Field: East Poplar County: Roosevelt State: Montana

Well Location: SW NW Section 10, T28N, R51E

STATUS PRIOR TO PRESENT JOB:

Date of Last Workover: September 18, 1969 T.D.: 5782'

Model D 5660' Producing Zone: Madison B-1, B-2 and C

Heath (Packed off) Perforations: 4884'-89', 5630'-37', 5776'-82'  
(open Hole) Latest Test: Flowing 9 BO and 190 BWPD on 8/64" Choke

JUSTIFICATION OF WOKOVER:

Recomplete well to co-mingle Madison and Heath and utilize 2 strings of tubing to dispose water into Dakota at 3185'-3230' and 3250'-3225'.

SUMMARY OF WOKOVER:

- 11-16-71 Moved Prather rig in, rigged up at 12 noon. Start pumping heavy salt water to kill well. 200 bbls water in. Well still flowing, pull one stand tubing. Well still flowing shut down for night.
- 11-17-71 Well flowing out tubing and casing. Well will not die, start out with wet string. First 10 stands out, 5 joints had holes in them, heavy water probably did not circulate deep enough to kill well. Out as far as pump barrel, flanged up well head to pump additional 80 bbls heavy water. Water in, tubing on vacuum, casing flowing. Pumped pit out, casing died. Start out with rest of tubing. Out with tubing, flange up, SDFN.
- 11-18-71 Rig up wireline to perforate for squeeze and log. Well logged. Model "D" set at 3410'. Perforated 4 holes at 3350 with 4 way gun. Start in with tubing, hydrotesting. In with tubing, found 3 bad joints. Rig to squeeze. Sand spotted on Model D. Bleed pressure off surface pipe. Pressured casing to 600#, pressure held. Started pumping water down tubing, well started taking water at 1400#, casing pressure started to rise, went to 800#, shut down, pressured casing to 1000#, casing bled off. Pulled 2 jts and reset packer. Pressured casing to 1000#, casing bled off. Pumped water down casing, water circulated out tbg, moved packer to 3391', (below perfs). Test packer to 2000#, bled off, decided packer was leaking, start out with tubing to change packer. Out with tubing, SDFN.

- 11-19-71 Start in with tubing and exchanged packer. In with tubing, rig to test packer at 3237'. Pressured casing to 600#, bled off. Pressured casing to 1000#, bled off. Pumped on tubing, 4 BPM at 1500#, casing started pressuring up. Raised packer to 3227', pressured casing to 1000#, bled off. Start pumping water down tubing to try to get circulation up surface pipe. Tubing pressure 1500#, casing went up to 1400#, opened tubing to pit, pumped on casing, well circulated out tubing. Set packer at 3390', pressured tubing to 2000#, bled off, either have bad packer or hole in tubing that was missed on hydrotest. Called for drop valve to check tubing. Pulled 5 joints tubing, waiting on drop valve. Dropped drop valve. Tubing would not hold pressure. Have tubing leak. Start out with wet string. Found hole in tubing at 1800', start back in. Pressured tubing to 2000#, held. Rig sand line to fish drop valve. Had trouble getting drop valve loose, finally out. Rig to pump water and try to establish circulation up surface pipe. Pressured casing to 1000#, held. Could not get circulation up surface pipe. Start 30 sack cement job. Cement job complete, pump rate, 1 BPM, initial pump pressure 500, increased to 1000. Immediate shut in 750, 5 min. shut in 350. Shut down for day to let cement cure.
- 11-20-71 1000# on tubing, 500# on casing, released pressure, did not receive any flow back. Move packer to 3050', rig wireline to perforate through tubing. Wireline shot will not go through seating nipple. Rig sinker bar to check for blockage. 2½" bar will not go through seating nipple. Out with tubing and remove seating nipple. Rig wireline to perforate 4 holes, 3150'-51'. Perforated start in with tubing. In with tubing, packer set at 3050', start pumping water, well started taking water at 1250# at rate of 4 BPM. Start 70 sx cement job. 1 BPM at 1200#. Job complete, immediate shut in 1100#, 5 min 900#. Released crews, W.O.C.
- 11-21-71 SITP 275# opened tubing, small flow back, shut in tubing, pressure went back to 275#. Pressured casing to 600#, bled off to 300#, repressured casing to 600# bled off again. Pumped into well with pump truck, well takes fluid at 1400#, 2 BPM. Start in with Wireline to perforate formation. Gun will not go past perforations. Run packer to perforations, packer stacks out, must have cement in pipe, called for bit and scraper. Decided to squeeze with additional 100 sx, called Halliburton. Rig to cement with 100 sx. Job complete, break down 1450-1400#, pump pressure during displacement 1 BPM 1400#, staged last 3 bbl cement, pump pressure while pumping 1400#, pump pressure while shut in 1000#, immediate shut in 1250#, 5 min shut in 1000#. SDFD.

- 11-22-71 1000# on tubing, released pressure, no flow back. Start out with tubing to run bit and scraper. Out with tubing. Tagged cement with bit, rig up power sub to drill. Start drilling cement at 3138'. Drilled 45' cement and stringers, circulated down to 3350', drilled 30' cement and stringers. Circulated hole on top of model D. SDFD.
- 11-23-71 Rig down circulating equipment. Start out with bit and scraper. Out with tubing, rig Wireline to perforate. Shot 3185'-3230', 1 shot per foot. Shot 3250'-3325', 1 shot per foot. Start in with tubing and packer, set packer at 3118'. In with tubing rig up pump truck. Start pumping, initial pressure 2100# at 2 BPM. After 5 min. 1600# at 2 BPM. After 30 min., 1400# at 2 BPM. Immediate shut in 1400#, 5 min. shut in 700#, 15 min. shut in 550#. Pumping with rig pump, initial pump pressure 1400#, after pumping 40 bbls water, pressure was 1300#. Shut down to tie on 2 pumps. Both pumps on, estimate 5 BPM, pressure 1600#. Pumped 40 bbls at 1500#, initial shut in 1300#. SDFD, will acidize in morning.
- 11-24-71 No work today, acid job cancelled. Waiting on orders.
- 11-25-71 Waiting on water to frac well with. Rig Dowell to frac. Established injection rate of 16 BPM at 2600#. Still waiting on water truck to fill tank. Start frac job. (See Dowell Report.) Job complete. Did not get all balls back, received only 8 of 33. Start out with tubing to put on scraper to try to knock balls loose. Back in with scraper. Scrapped perforations. Hook up Dowell for injection test. Started rate of 13 BPM at 3000#, increased to 15 BPM at 3600#. Pumped 130 bbls water at this rate. No break down. SDFD. Released Dowell.
- 11-26-71 Rig Wireline to reperforate. Flow tubing back to try to get more balls, did not get any. Balls must be buried in sand that came back out of formation and is on top of Model D. Wireline gun would not go through scraper. Start out of hole with tubing to remove scraper. Start back in hole with tubing. In with tubing, flange up to pump test again. Start pumping, 20 bbls at 2 BPM, initial pressure 500 increased to 750, back flowed 20 bbls, pumped 20 bbls at 3 BPM, initial pressure 500 increased to 800. Shut in pressure 600#. Ran 2 stands and set packer between perfs. Flowed back lower perfs through tubing, upper perfs through casing. Lower perfs flow more water than upper. Pumped on lower perfs, immediate pressure was 1000#, pumped 10 bbls water, 3 BPM at 1200#. Pumped on upper perfs, 5 BPM at 500#, increased to 800#, in 5 bbls fluid, pumped at 3 BPM, 20 bbls, pressure started at 500 and increased to 800. Released packer, pulled 2 stands, rig to reperforate 3190'-3230'. Start in with gun, due to tubing flowing, gun would only go in at about 1 ft/sec. Shot 3190'-3230', 1 shot/ft. Shut down for day.

11-27-71 Rig well to flow to 300 bbl tank. Start well flowing to tank. Start pumping on upper perfs, initial psi 500#, pumped at 1 BPM, 60 bbls water, pressure steadily increased to 700#. Increased rate to equal disposal pump, pump pressure was steady at 1000#. Start surging fluid by pumping 40 bbls and flowing back 40 bbl. Pump pressure during this 1200#. Pumped this way for rest of afternoon. Shut down for day.

11-28-71 Start out with tubing, laying down. Flanged up well, hooked up steel line from disposal pump and started pumping lease water. Disposal pump relief valve holding pressure at 650#. Released rig. Put Huber Wells 1M, 1N, 3 and 4A back on production.

12-06-71 Well accepting estimated 1400 BWPD at 770#. All wells back on production except Huber 2 & 5.

Recap of Workover:

Final Perforations: 4884'-89', 5616'-22', 5630'-37', 5776'-82' (open hole) all above perfs temporarily packed off. Disposal perfs open at 3185'-3230' and 3250'-3325'.

Final PBDT: (temporary) Model D at 3410', with Exp plug, no flapper.

Initial Potential: Well accepts 1400 BWPD at 770psi.

Geological Name of Disposal Zone: Dakota Sand

Geological Name of Producing Zones: Madison & Heath

Down Hole Equipment: 5776' 7" 23-26# casing (no tubing)

Results of Workover:

Oil production temporarily shut in pending disposal test. If well proves it is satisfactory for disposal purposes, Madison and Heath zones will be re-opened by utilizing 2 strings of 2" tubing, one producing Madison and Heath comingled and one disposing of water into Dakota Sand.

HUBER NO. 2

WORKOVER HISTORY NO. 5

Lease and Well No.: Huber NO. 2

Field: East Poplar County: Roosevelt State: Montana

Well Location: SW NW Section 10, T28N, R51E

STATUS PRIOR TO PRESENT JOB:

Date of Last Workover: November 1971 Convert to salt water disposal

TD: 5782' Model D 3410' Producing Zone: None, using well as SWD

Perforations: 3185'-3230', 3250'-3325' (Dakota) (Model D Below)

4884'-89' (Heath); 5616'-22', 5630'-37' open hole 5776'-82' Madison

Latest Test: Well accepts 1936 BWPD at 1200 psi

JUSTIFICATION OF WORKOVER:

Put well back on oil production as it is no longer needed as a disposal.

SUMMARY OF WORKOVER:

10-23-73 Rig up, rig to pick up 2-3/8" Hydrill tubing, run tubing in well as follows:

Baker Latching Seal Assy with 5' prod tube 7.45  
2-7/8" x 2-3/8" EUE 8rd. swage  
Total 13.38' 2-3/8" EUE 8rd box x 2-3/8" NU 10rd pin swage  
2-3/8" NU 10rd box x 2-3/8" CS Hydrill Box  
2-3/8" CS Hydrill x 4' tubing sub  
112' jts 2-3/8" CS Hydrill Tubing  
1 - 2-7/8" EUE 8rd., x 2-3/8" CS Hydrill Swage  
1 - 2-7/8" EUE 8rd., x 3' Tubing Sub

Tagged fillup at 3300', rig to circulate. Circulated in 1 joint, shut down for night.

10-24-73 Circulated shale and frac sand, 2 more joints to Model D packer, knocked out plug in packer, spaced out, latched tubing in packer. Set down on tubing, flanged well up. Released rig.

Recap of Workover:

Final Perforations: 3185'-3230', 3250'-3325', Open to csg. 4884'-89', Heath; 5616'-22', 5630'-37', 5776'-82' Madison open to tubing.

Final PBTD: 5782'

Initial Potential: 12 BOPD, 245 BWPD flowing 8/64

Name of Producing Zone: Heath and Madison

Downhole Equipment: See above

Huber #2 Profile  
10-15-73  
KB. 9'

10-3/4" Surface Pipe @ 1006'  
cemented with 450 sx.

Dakota Perforations @ 3125-3250  
3250-3325; 3350 (Squeezed):

2-3/8" CS Hydrill Tubing

Model D Packer @ 3410

Heath Perforations @ 4624-29

Madison B-1 Perfs 5616-22

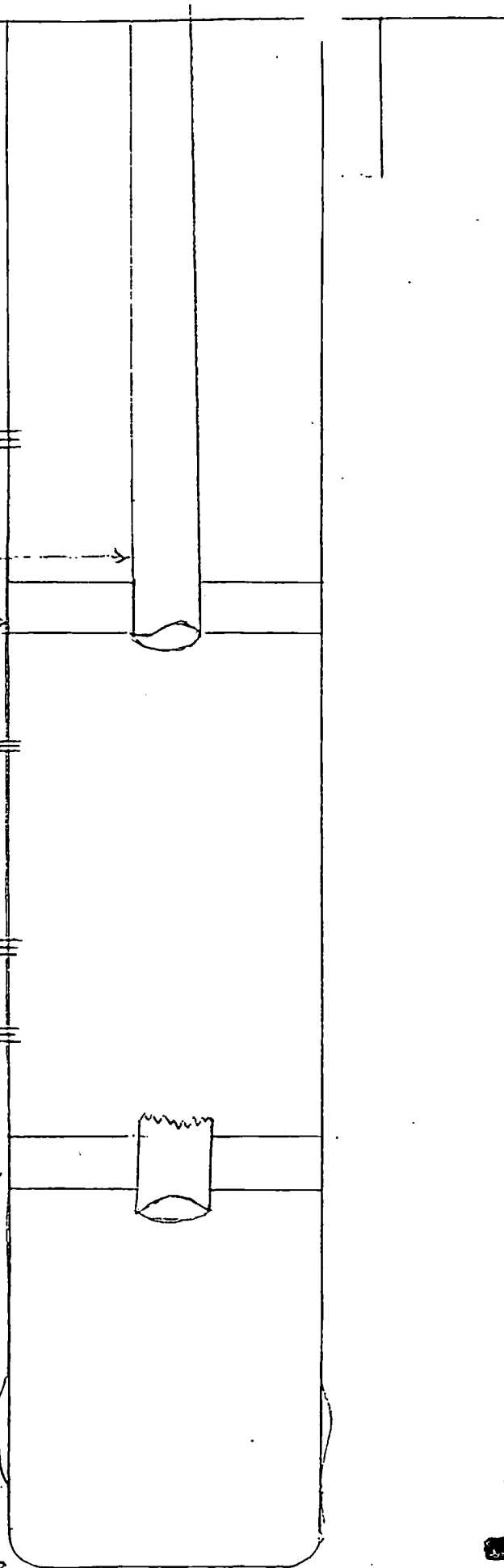
Suspected Communication  
Madison B-2 Perfs 5650-37

Baker Model D at 5660 with  
suspected broken tubing stub.

1 23" Casing @ 5776' (300 sx)

"C" Zone Open Hole 5776-22

T.D 5782



SERVICE AND  
INVOICE NUMBER 452-115  
TERMS: NET 30, ADD LEGAL INTEREST THEREAFTER.

**{ Please indicate on all remittances  
{ and send to: 1579 EAST 21 STREET  
TULSA, OKLAHOMA 74114**

## SERVICE ORDER RECEIPT

DATE 11	CUSTOMER ORDER NO.	SHIPPED VIA DOWELL	SERVICE FROM DOWELL STATION 1-10-10	OUTPOST		
WELL NAME AND NUMBER WELL 10-23N-51E		LOCATION AND POOL SEC 10-23N-51E		SERVICE ORDER IMPORTANT, SEE OTHER SIDE FOR TERMS & CONDITIONS I have read, understood and agreed to the terms & conditions printed on the reverse side hereof and represent that I have full authority to accept same and sign this order. CUSTOMER BY 1-10-10 AUTHORIZED AGENT		
COUNTY, CITY (IF WITHIN CITY LIMITS) & STATE 10-10-10		TYPE OF SERVICE W-F-10				
CUSTOMER'S NAME WILLIAMS CORPORATION		ADDRESS 10-10-10				
CITY, STATE & ZIP CODE 10-10-10		ZIP CODE 10-10-10		RECEIPT: THE UNDERSIGNED HEREBY CERTIFIES THAT THE MATERIALS AND EQUIPMENT LISTED ABOVE WERE RECEIVED AND THE SERVICES WERE PERFORMED IN WORKMANLIKE MANNER. CUSTOMER BY 1-10-10 AUTHORIZED AGENT		
SERVICE INSTRUCTIONS: 10-10-10						
ITEM NO.	QUANTITY	UNIT	Material, Equipment and Services Used		Unit Price	AMOUNT
			10-10-10		1.36	1535.44
			10-10-10		20.00	250.00
			10-10-10		1.12	336.00
			10-10-10		2.88	288.00
			10-10-10		1.04	105.00
			10-10-10		.70	135.00
			10-10-10		48.00	48.00
			10-10-10	165	21.45	
SUB TOTAL					2145.00	
Gallons				License Fee		
Gallons				License Fee		
Tax on \$						
Tax on \$						
TOTAL				\$		



## STIMULATION TREATMENT REPORT

DOWELL

DATE

2-8-72

DWL-494-J. PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

WELL NAME AND NUMBER

LOCATION

CUSTOMER REPRESENTATIVE

TREATMENT NUMBER

POOL

FORMATION

JOB/DONE DOWN

ALLOWABLE PRESSURE

COUNTY

STATE

TUBING

CASING

ANNULUS

TBC:

CSG:

TYPE OF WELL

OIL

GAS

WATER

JNL

A

B

C

D

AGE OF WELL

NEW WELL

REWORK

TOTAL DEPTH

CIRC. BHT.

CASING SIZE

CASING DEPTH

TUBING SIZE

TUBING DEPTH

LINER SIZE

LINER DEPTH

PACKER TYPE

PACKER DEPTH

OPEN HOLE

CSG. OR ANHL. VOL.

TBC VOLUME

STATIC BHT.

## PERFORATED INTERVALS

DEPTH

NO. OF HOLES

DEPTH

NO. OF HOLES

DEPTH

NO. OF HOLES

CUST. NAME

ADDRESS

CITY, STATE &amp; ZIP CODE

REMARKS:

FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS

ARRIVED ON LOCATION:

TIME	INJECTION		PRESSURE	
	RATE	BBLs IN	CSG.	TBC.
0930				
0940	6		400	-
1007	7	148	1150	-
1017	8	148	300	-
1020	8	168	1050	-

## SERVICE LOG

Safety meeting Hookup-

Fill Line &amp; Test o.k.

START Acid - via casing

148 BBLs Total LET soak-

START Pump-

Acid displaced

ISIP- 800

Max psi - 1175

Avg psi - 1050

Min psi - 1000

Max Rate 8 BPM

Min Rate - 6 BPM

Avg Rate - 6 1/2 BPM

3 min Shut In - 200 psi -

TIME LEFT LOCATION	AVG. LIQUID INJ. RATE	ADJ. RATE (SOLIDS INC)	TOTAL FLUID PUMPED		PROPS AND LIQUIDS INJECTED		
			OIL	WATER	TYPE	SIZE OR PURPOSE	AMOUNT
1030				114 BBL			
MAX. PRESSURE	AVG. PRESSURE	FINAL PUMP IN PRESSURE	SHUT IN PRESSURE				
1175	1050	1050	800				
DOWELL LOCATION			DOWELL ENGINEER				
Hendrix			DC HX				
CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER	SATISFACTORY	PROD. BEFORE TREATMENT	PROD. AFTER TREATMENT	
			CONSIDERED	UNSATISFACTORY	TEST	ALLOWABLE	TEST ALLOWABLE
			SERVICE	UNKNOWN			

# DOWELL

DIVISION OF THE DOW CHEMICAL COMPANY

CUSTOMER

## SERVICE AND

INVOICE NUMBER 15-2-7205

TERMS: NET 30. ADD LEGAL INTEREST THEREAFTER.

**( Please indicate on all remittances**

**{ and send to: 1579 EAST 21 STREET**

**TULSA, OKLAHOMA 74114**

## SERVICE ORDER RECEIPT

DATE 2-8-72	CUSTOMER ORDER NO. .	SHIPPED VIA F. O. T.	SERVICE FROM DOWELL STATION ...	OUTPOST ...
----------------	-------------------------	-------------------------	------------------------------------	----------------

WELL NAME AND NUMBER	LOCATION AND POOL	<b>SERVICE ORDER</b> IMPORTANT, SEE OTHER SIDE FOR TERMS & CONDITIONS I have read, understood and agreed to the terms & conditions printed on the reverse side hereof and represent that I have full authority to accept same
COUNTY, CITY (IF WITHIN CITY LIMITS) & STATE	TYPE OF SERVICE	

CUSTOMER'S NAME \_\_\_\_\_ and sign this order.  
 CUSTOMER  
 BT \_\_\_\_\_

NAME \_\_\_\_\_ AUTHORIZED AGENT \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

CITY, STATE & ZIP CODE

### SERVICE INSTRUCTIONS

Deletys pcy 2185 to 3230 + 3250  
20 gal @ 15% HCL

ITEM NO.	QUANTITY	UNIT	Material, Equipment and Services Used	Unit Price	AMOUNT
			Pumped		
	750 gal		15 % HCl		
	4 gal		A-160		
	2 gal		F-40		
	165 mc		BF-2		
	65 mi				
			SUB TOTAL		
			Gallons License Fee		
			Gallons License Fee		
%			Tax on \$		
%			Tax on \$		
				TOTAL	\$

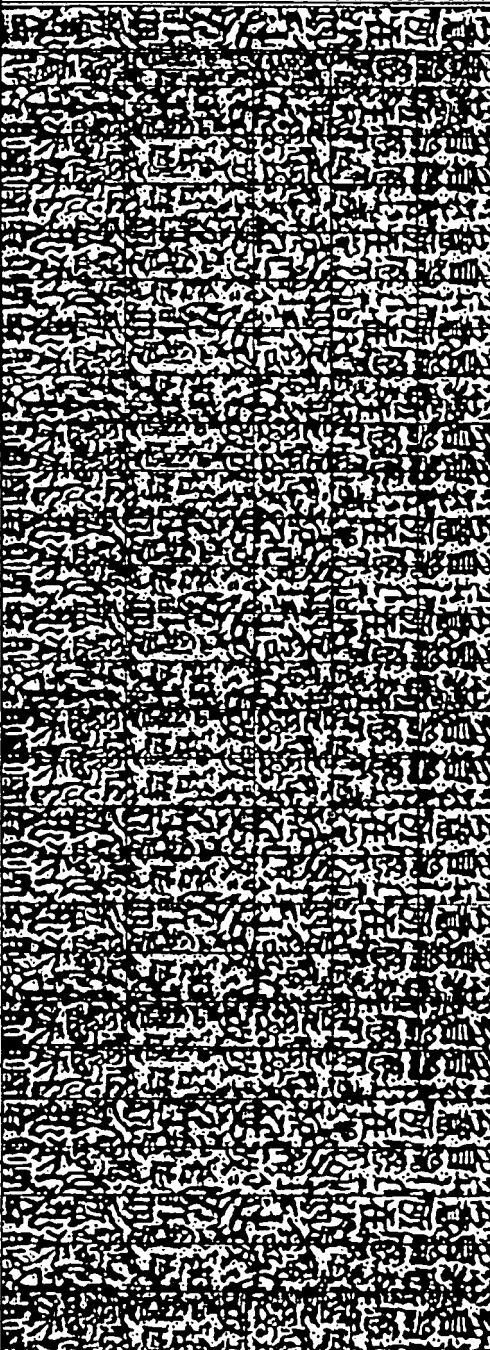
## SERVICE ORDER

**IMPORTANT, SEE OTHER SIDE FOR TERMS & CONDITIONS**

I have read, understood and agreed to the terms & conditions printed on the reverse side hereof and represent that I have full authority to accept same and sign this order.

CUSTOMER  
BT

**AUTHORIZED AGENT**



DOWELL ENGINEER	PAYROLL INIT.
-----------------	---------------

f		g

RECEIPT: THE UNDERSIGNED HEREBY CERTIFIES THAT THE MATERIALS AND EQUIPMENT LISTED ABOVE WERE RECEIVED AND THE SERVICES WERE PERFORMED IN WORKMANLIKE MANNER.

CUSTOMER
----------

**AUTHORIZED AGENT**



**DOW** **LL** DIVISION OF THE DOW CHEMICAL COMPANY

CUSTOMER

SERVICE AND  
INVOICE NUMBER 15-02-7289  
TERMS: NET 30. ADD LEGAL INTEREST THEREAFTER.

{ Please indicate on all remittances  
and send to: **1579 EAST 21 STREET**  
**TULSA, OKLAHOMA 74114**

SERVICE ORDER RECEIPT

DATE <u>4-20-72</u>	CUSTOMER ORDER NO.	SHIPPED VIA	SERVICE FROM DOWELL STATION	OUTPOST
------------------------	--------------------	-------------	-----------------------------	---------

WELL NAME AND NUMBER	LOCATION AND POOL
----------------------	-------------------

COUNTY, CITY (IF WITHIN CITY LIMITS) & STATE	TYPE OF SERVICE <u>Bulk Sale</u>
--	-------------------------------------

CUSTOMER'S NAME <u>U. D. Tolson</u>	[ Stamp: RECEIVED APR 20 1972 ]
ADDRESS <u>U. D. Tolson</u>	
CITY, STATE & ZIP CODE <u>Tulsa, Okla 74106</u>	

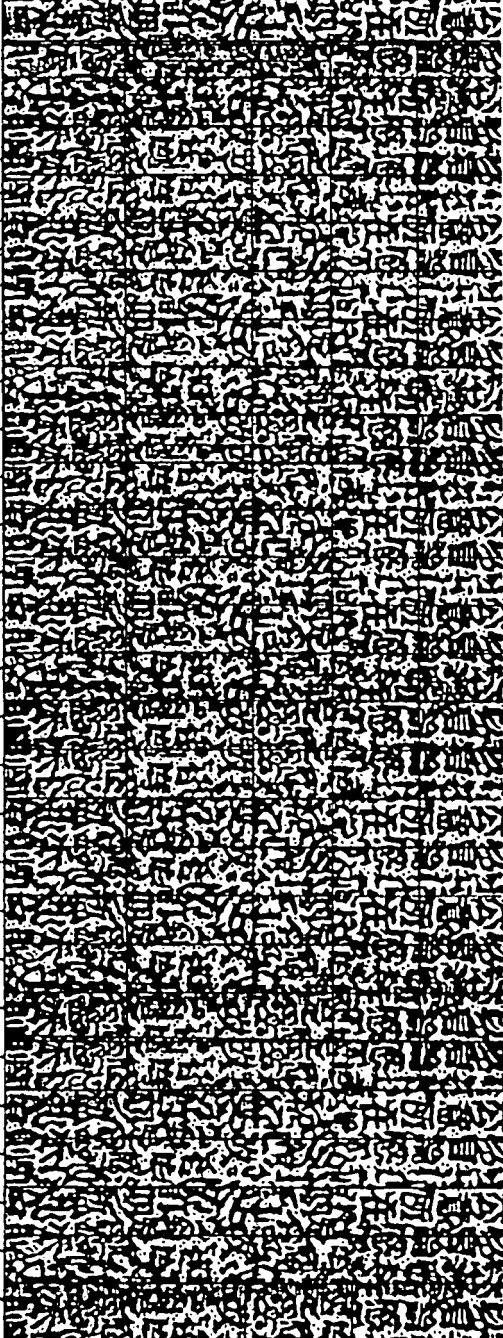
SERVICE INSTRUCTIONS: Bulk Sale

ITEM NO.	QUANTITY	UNIT	Material, Equipment and Services Used	Unit Price	AMOUNT
	110	gal	1590 HCl Acid	1.00	110.00
	5	gal	E40 Surfactant	21.00	105.00
	144	mc	Mulch	.74	106.56
SUB TOTAL					107.56
Gallons License Fee					
Gallons License Fee					
% Tax on \$					
% Tax on \$					
TOTAL				\$	

SERVICE ORDER  
IMPORTANT: SEE OTHER SIDE FOR TERMS & CONDITIONS

I have read, understood and agreed to the terms & conditions printed on the reverse side hereof and represent that I have full authority to accept same and sign this order.

CUSTOMER BY  
AUTHORIZED AGENT



RECEIPT: THE UNDERSIGNED HEREBY CERTIFIES THAT THE MATERIALS AND EQUIPMENT LISTED ABOVE WERE RECEIVED AND THE SERVICES WERE PERFORMED IN A WORKMANLIKE MANNER.  
CUSTOMER BY  
AUTHORIZED AGENT



**LL**

DIVISION OF THE DOW CHEMICAL COMPANY

**CUSTOMER**

SERVICE AND  
INVOICE NUMBER

**TERMS:** NET 30. ADD LEGAL INTEREST THEREAFTER.

**{ Please indicate on all remittances  
{ and send to: 1579 EAST 21 STREET**

**TULSA, OKLAHOMA 74114**

## SERVICE ORDER RECEIPT

[illegible]

## SIMULATION TREATMENT REPORT

DOWELL

DWL-494-J PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

DATE

5-8-73

WELL NAME AND NUMBER

Huber #2

LOCATION

FORMATION

STATE

MONTANA

CUSTOMER REPRESENTATIVE

MR. NESS

TREATMENT NUMBER

15-05-7336

POOL

EAST POPLAR.

COUNTY

ROOSEVELT

TYPE OF SERVICE

Acid

JOB DONE DOWN  
TUBING ☐ CASING ☒ ANNULUS ☐

ALLOWABLE PRESSURE

TSG: 5 CSOI: 500

TYPE OF WELL

OIL ☐GAS ☐WATER ☐INJ. ☒

AGE OF WELL

NEW WELL ☐REWORK ☒

TOTAL DEPTH

CIRC. BHT.

CASING SIZE

CASING DEPTH

TUBING SIZE

TUBING DEPTH

7

5776

LINER SIZE

LINER DEPTH

PACKER TYPE

PACKER DEPTH

OPEN HOLE

CSG. OR AMRL. VOL.

TSG VOLUME

STATIC BHT.

## PERFORATED INTERVALS

DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
385	1	3230			
3250	1	3325			

CUST. NAME

ADDRESS

CITY, STATE &amp; ZIP CODE

REMARKS:

ARRIVED ON LOCATION:

1300

TIME INJECTION PRESSURE  
RATE BBLs IN CSG. TBG.

## SERVICE LOG

Ramp 500 gals. 28% HCl/Acid in Injection Well per Operators Instructions.

pressure dropped on well from 1100 to 850  
Technician

TIME LEFT LOCATION	AVG. LIQUID INJ. RATE	ADJ. RATE (SOLIDS INC)	TOTAL FLUID PUMPED	PROPS AND LIQUIDS INJECTED		
4:30			1500	TYPE	SIZE OR PURPOSE	AMOUNT
MAX. PRESSURE	AVG. PRESSURE	FINAL PUMP IN PRESSURE	SHUT IN PRESSURE	HCl	28%	500 gals.
500		500	IMMEDIATE 15-MINUTES			
DOWELL LOCATION	DOWELL ENGINEER					
Williston, N.D.K.	C. G. White					
CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER CONSIDERED SERVICE	PROD. BEFORE TREATMENT		PROD. AFTER TREATMENT
			<input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN	TEST ALLOWABLE		TEST ALLOWABLE



**DOWELL** DIVISION OF THE DOW CHEMICAL COMPANY

CUSTOMER

SERVICE AND

INVOICE NUMBER 15-05-1336

TERMS: NET 30. ADD LEGAL INTEREST THEREAFTER.

{ Please indicate on all remittances  
and send to: **1579 EAST 21 STREET**  
**TULSA, OKLAHOMA 74114**

SERVICE ORDER RECEIPT

DATE <u>1-23</u>	CUSTOMER ORDER NO.	SHIPPED VIA <u>Dowell</u>	SERVICE FROM DOWELL STATION <u>15111370</u>	OUTPOST
---------------------	--------------------	------------------------------	--	---------

WELL NAME AND NUMBER	LOCATION AND POOL <u>EAST Poplar.</u>	SERVICE ORDER
COUNTY, CITY (IF WITHIN CITY LIMITS) & STATE <u>Mont. Hild</u>	TYPE OF SERVICE <u>Hild</u>	IMPORTANT: SEE OTHER SIDE FOR TERMS & CONDITIONS I have read, understood and agreed to the terms & conditions printed on the reverse side hereof and represent that I have full authority to accept same and sign this order.

CUSTOMER'S NAME <u>Lumber Co. Co.</u>	CUSTOMER BY <u>[Signature]</u>	AUTHORIZED AGENT
ADDRESS <u>1000 Capital Life Center</u>		
CITY, STATE & ZIP CODE <u>Calo.</u>	ZIP CODE	

SERVICE INSTRUCTIONS: 1000 133615. 28% Hild in Injection  
28% Hild in Injection

ITEM NO.	QUANTITY	UNIT	Material, Equipment and Services Used	Unit Price	AMOUNT
1	1	HW	T.D. PUMPER	190.00	190.00
2	1	gal	28% Hild Acid	.73	365.00
3	1	gal	170 Inhibitor	8.50	17.00
4	1	mi	Milong Pump Truck	.95	30.25
SUB TOTAL					604.25
Gallons				License Fee	
Gallons				License Fee	
%				Tax on \$	
%				Tax on \$	
TOTAL				\$	

pressure dropped on  
well from 1100 to 85

[Signature]



DOWELL ENGINEER	PAYROLL INIT.
RECEIPT: THE UNDERSIGNED HEREBY CERTIFIES THAT THE MATERIALS AND EQUIPMENT LISTED ABOVE WERE RECEIVED AND THE SERVICES WERE PERFORMED IN A WORKMANLIKE MANNER.	
CUSTOMER	
BY	AUTHORIZED AGENT

HALLIBURTON

SEND ALL REMITTANCES TO

PAGE 1 OF

INVOICE &amp; TICKET

P. O. DRAWER 1431

DUNCAN, OKLAHOMA 73533

PAGES

NO. 213345

A DIVISION OF HALLIBURTON COMPANY  
FORM 1905-R1

WELL NO. AND FARM #2 Huber		COUNTY Roosevelt	STATE MONTANA	DATE 11-20-71
OWNER The Columbus Corp.		CONTRACTOR Prather Well Service		DUNCAN USE ONLY
CHARGE TO The Columbus Corp.	DELIVERED TO		LOCATION 16/2nd Ave	CODE 55530
ADDRESS 1000 CAPITAL LIFE Bldg. DENVER CO.	SHIPPED VIA		LOCATION 2	CODE
DUNCAN USE ONLY	CUST. INV. REQ. ORIG. & <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	REQUISITION	LOCATION 3	CODE
		ORDER NO.	BULK MATERIAL DELIVERY TICKET NO. B-104992	
		TOTAL ACID - 30 DAYS	WELL TYPE	CODE
		NO. COPIES		

TYPE AND PURPOSE OF JOB

Squeeze

TERMS:

DUE BY THE 20TH OF FOLLOWING MONTH, INTEREST  
CHARGED AFTER 60 DAYS FROM DATE OF INVOICE.

\$ Cash discount allowed if paid by due date.

\$ Tax adjustment may be deducted if discounted.

PRICE REFERENCE	SECONDARY REF. OR PART NO.	CODE		DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT
		L	D		QTY.	MEAS.	QTY.	MEAS.		
				11-18-71						
9-011-056				PUMPING CHARGE	1	TRUCK				278 00
9-000-117				Mileage	100	MILES			90	90 00
				11-19-71						
9-009-159				PUMPING CHARGE	3350	FT.				662 00
				11-20-71						
9-009-159				PUMPING CHARGE	1500	FT.				162 00
505-040				PERMANENT CHARGE	100	SRS			1.74	174 00
318-501				20-40 SAND (NOT-MIXED)	2	SRS			2.89	5 78
				SERVICE CHARGE ON MATERIALS RETURNED						
500-207				SERVICE CHARGE	100	CU. FT.			.43	43 00
506-314				9600 TOTAL WEIGHT 125 LOADED MILES 600					28	168 00

TAX REFERENCES

SUB TOTAL

WAS JOB SATISFACTORILY COMPLETED? \_\_\_\_\_

WAS OPERATION OF EQUIPMENT SATISFACTORY? \_\_\_\_\_

WAS PERFORMANCE OF PERSONNEL SATISFACTORY? \_\_\_\_\_

X Jed A. Lee  
Customer or His Agent

O.T. Gulletson

Halliburton Operator

TOTAL 2102 78

CUSTOMER



## WORK ORDER CONTRACT AND PRE-TREATMENT DATA

ATTACH TO  
INVOICE & TICKET NO. 213345

DISTRICT Glendice

DATE 11-18-71

TO: HALLIBURTON SERVICES

YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE

THE SAME AS AN INDEPENDENT CONTRACTOR TO: The Columbus Corp.  
(CUSTOMER)

AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. 2 LEASE Huber SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RANGE \_\_\_\_\_

FIELD E. Porlan COUNTY Rooseruit STATE MONTANA OWNED BY The Columbus Corp.

### THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
FORMATION THICKNESS	FROM TO						
PACKER: TYPE <u>Baker Full Bore</u>	SET AT <u>3237</u>						
TOTAL DEPTH	MUD WEIGHT						
BORE HOLE							
INITIAL PROD: OIL _____ BPD, H <sub>2</sub> O _____ BPD, GAS _____ MCF							
PRESENT PROD: OIL _____ BPD, H <sub>2</sub> O _____ BPD, GAS _____ MCF							
CASING			<u>23#</u>	<u>2"</u>		<u>5782</u>	
LINER							
TUBING			<u>6 1/2</u>	<u>2 1/2</u>		<u>3237</u>	
OPEN HOLE							SHOTS/FT.
PERFORATIONS						<u>3356</u>	
PERFORATIONS							
PERFORATIONS							

PREVIOUS TREATMENT: DATE \_\_\_\_\_ TYPE \_\_\_\_\_ MATERIALS \_\_\_\_\_

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ☐ ANNULUS ☐ CASING ☐ TUBING/ANNULUS ☐ HYDRAULIC HORSEPOWER ORDERED \_\_\_\_\_

Spare

CUSTOMER OR HIS AGENT STATES THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED

As consideration, the above-named Customer agrees:

- To pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists.
- Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct or gross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.
- Customer shall be responsible for and secure Halliburton against any liability for reservoir loss or damage, or property damage resulting from subsurface pressure; losing control of the well and/or a well blowout, unless such loss or damage is caused by the willful misconduct or gross negligence of Halliburton.
- Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of subsurface trespass, or an action in the nature thereof, arising from a service operation performed by Halliburton hereunder.
- Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.
- Halliburton makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or service.
- Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
- Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Halliburton is unable to guarantee the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be responsible for any damages arising from the use of such information except where due to Halliburton's gross negligence or willful misconduct in the preparation or furnishing of it.
- Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.
- Upon Customer's default in the payment of Customer's account 60 days after receipt of invoice, such account will be subject to interest after date of invoicing until paid. In the event it becomes necessary to employ an attorney to enforce collection of such account, Customer agrees to pay all collection costs and attorney fees in the amount of 20 per cent of the amount of the unpaid account.
- Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED

CUSTOMER

DATE 11-18-71

# HALLIBURTON SERVICES JOB SUMMARY

FORM 2012

HALLIBURTON  
DIVISION

Denver

HALLIBURTON  
LOCATION

Glendive

BILLED ON  
TICKET NO.

213345

## WELL DATA

WELL E. Poplar SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RNC. \_\_\_\_\_ COUNTY Roosevelt STATE MONTANA

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_

FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_

INITIAL PROD: OIL \_\_\_\_\_ BPO. WATER \_\_\_\_\_ BPO. GAS \_\_\_\_\_ MCFO \_\_\_\_\_

PRESENT PROD: OIL \_\_\_\_\_ BPO. WATER \_\_\_\_\_ BPO. GAS \_\_\_\_\_ MCFO \_\_\_\_\_

COMPLETION DATE \_\_\_\_\_ MUD TYPE \_\_\_\_\_ MUD WT. \_\_\_\_\_

ACKER TYPE Baker Full Bone SET AT 3237

OTTOM HOLE TEMP. \_\_\_\_\_ PRESSURE \_\_\_\_\_

WISC. DATA \_\_\_\_\_

## JOB DATA

CALLER OUT <u>11-18</u>	ON LOCATION <u>11-18</u>	JOB STARTED <u>11-18</u>	JOB COMPLETED
DATE	DATE	DATE	DATE
TIME <u>0600</u>	TIME <u>1030</u>	TIME <u>1430</u>	TIME

## PERSONNEL AND SERVICE UNITS

NAME	EMPL. NO.	UNIT NO. & TYPE	LOCATION
<u>Gullickson</u>		<u>8750</u>	<u>Glendive</u>
<u>Ritter</u>		<u>61-6-2</u>	<u>Mont.</u>
<u>Charles</u>			
<u>Estes</u>			

## TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
LOAT COLLAR		
LOAT SHOE		
UIOE SHOE		
ENTRALIZERS		
OTTOM PLUG		
OP PLUG		
HEAD		
ACKER		
OTHER		

## MATERIALS

REAT. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. API

WSP. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. API

ROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.

ROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.

ICIO TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ %

ICIO TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ %

ICIO TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ %

URFACTANT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ IN

IE AGENT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ IN

UIDO LOSS ADD. TYPE \_\_\_\_\_ GAL. LB \_\_\_\_\_ IN

ELLING AGENT TYPE \_\_\_\_\_ GAL. LB \_\_\_\_\_ IN

RIC. RED. AGENT TYPE \_\_\_\_\_ GAL. LB \_\_\_\_\_ IN

REAKER TYPE \_\_\_\_\_ GAL. LB \_\_\_\_\_ IN

LOCKING AGENT TYPE \_\_\_\_\_ GAL. LB \_\_\_\_\_

ERFPAC BALLS TYPE \_\_\_\_\_ QTY. \_\_\_\_\_

OTHER \_\_\_\_\_

OTHER \_\_\_\_\_

DEPARTMENT CEMENT

DESCRIPTION OF JOB SQUEEZE

JOB DONE THRU: TUBING ☒ CASING ☐ ANNULUS ☐ TBC/ANN. ☐

CUSTOMER REPRESENTATIVE X Ted Nees

HALLIBURTON OPERATOR O.T. Gullickson COPIES REQUESTED \_\_\_\_\_

## CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./BK.	MIXED LBS./GAL.
	<u>100</u>	<u>Reg</u>	<u>G</u>	<u>permanente</u>			<u>1.15</u>	<u>15.8</u>

## SUMMARY

### PRESSURES IN PSI

IRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_

REAKDOWN \_\_\_\_\_ MAXIMUM 1000

VERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_

PUT-IN: INSTANT \_\_\_\_\_ 3-MIN. \_\_\_\_\_ 15-MIN. \_\_\_\_\_

### HYDRAULIC HORSEPOWER

ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_

### AVERAGE RATES IN BPM

REATING \_\_\_\_\_ DISPL. 1 OVERALL \_\_\_\_\_

### CEMENT LEFT IN PIPE

REET \_\_\_\_\_ REASON \_\_\_\_\_

### VOLUMES

REFLUSH: BBL. GAL. \_\_\_\_\_ TYPE \_\_\_\_\_

LOAD & BKON: BBL. GAL. \_\_\_\_\_ PAD: BBL. GAL. \_\_\_\_\_

TREATMENT: BBL. GAL. \_\_\_\_\_ DISPL: BBL. GAL. 245

CEMENT SLURRY: BBL. GAL. 20.4

TOTAL VOLUME: BBL. GAL. \_\_\_\_\_

### REMARKS

CUSTOMER

CUSTOMER THE Columbus CORP LEASE Huber WELL NO. 2 JOB TYPE SQUEEZE DATE 11-19-71

NO. B 104992

**FORM 1011 R-1**

TRUCK NUMBER	PRICE REFERENCE	SECONDARY REFERENCE	BRAND AND TYPE	1 UNITS *	2 UNITS	UNIT PRICE	AMOUNT
7755	505-040		Permanent Class "G" Cement f-Mont. City.	100		1.94	194 00
	318.506		20-40 SAND (NET MIXED)			289	5 78
			SERVICE CHARGE ON MATERIALS RETURNED			CU. FT.	
	500-207		SERVICE CHARGE			CU. FT.	
			MILEAGE CHARGE	9.400	TOTAL WEIGHT	125	LOADED MILES
	500-214						

⚡ SACKS UNLESS OTHERWISE INDICATED

TOTAL

## CUSTOMER

## JOB LOG

CUSTOMER E.A. Columbus Jr.

PAGE NO. \_\_\_\_\_

JOB TYPE \_\_\_\_\_

DATE 11-18

FORM 2013

CHART NO.	TIME	RATE (UPM)	VOLUME (DBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1430		17			700		SPOT 2.5XS. 20-40-SAND ON- TOP MOD. P.
	1500		1				600	PRESSURE CASING
	1505		2 1/2			1500	1000	PUMP INTO FORMATION
								CSG. PRESSURE INCREASED SO
								SET PACKER 5 FT. ABOVE SAND
	1530					2000		& TESTED TO - 2000-PSI. DID NOT HOLD
								11-19-61
	0930					1000		PRESSURE CASING.
	0945					2000		PRESSURE PACKER ABOVE MOD. D
	1030					2000		PRESSURED-TUBING -
								PRESSURE bled OFF SO - CAMP
								OUT OF HOLE & FOUND BED JAW
								RUN TUBING TO - BOTTOM TO - SQUEEZE
	1436						1000	PRESSURE CASING
	1435		2 1/2			1250	800	PUMP INTO FORMATION
	1437					1000	800	MIX-CEMENT
	1446					650	800	START DISPLACING
	1443					700	800	CEMENT STARTING IN FORMATION
	1446					500	700	SLOW-RET. TO - 1-BP. A.
	1500					1000	500	SHUT DOWN - JOB COMPLETE

CUSTOMER



A DIVISION OF HALLIBURTON COMPANY  
FORM 1906-R1

SEND ALL REMITTANCES TO  
P. O. DRAWER 1431  
DUNCAN, OKLAHOMA 73533

PAGE 1 OF  
1 PAGES

INVOICE & TICKET  
NO. 413419

WELL NO. AND FARM <i>2 Hucker</i>	COUNTY <i>Wesworth</i>	STATE <i>Okla</i>	DATE <i>11-21-71</i>
OWNER <i>The Petroleum Corp.</i>	CONTRACTOR <i>Weather</i>		DUNCAN USE ONLY
CHARGE TO <i>The Petroleum Corp.</i>	DELIVERED TO <i>Joe</i>	LOCATION <i>1 Okla</i>	CODE <i>555301</i>
ADDRESS <i>1000 Capital Bldg Denver Colo</i>	SHIPPED VIA <i>to Equip</i>	LOCATION <i>2</i>	CODE
DUNCAN USE ONLY	CUST. INV. REQ. ORIG. & <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	REQUISITION ORDER NO. TOTAL ACID - 30 DAYS	LOCATION <i>3</i> CODE <i>B-104997</i> WELL TYPE <i>Oil Well</i> CODE <i>112</i>
	NO. COPIES		
	TERMS: DUE BY THE 20TH OF FOLLOWING MONTH. INTEREST CHARGED AFTER 60 DAYS FROM DATE OF INVOICE. \$ Cash discount allowed if paid by due date. \$ Tax adjustment may be deducted if discounted.		
	TYPE AND PURPOSE OF JOB <i>Spillage</i>		

PRICE REFERENCE	SECONDARY REF. OR PART NO.	CODE		DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT
		L	D		QTY.	MEAS.	QTY.	MEAS.		
5009-159				Pump Charge	3150	ft.				662.00
1000-117				Mileage	100	mi.			90	90.00
505-040				Team Class 6' Load					1.74	174.00
THIS IS NOT AN INVOICE										
				SERVICE CHARGE ON MATERIALS RETURNED		CU. FT.				
500-307				SERVICE CHARGE	100	CU. FT.			43	43.00
506-314				9.400 TOTAL WEIGHT 125 LOADED MILES	37.50	TON MILES			22	144.50

TAX REFERENCES

SUB TOTAL

WAS JOB SATISFACTORILY COMPLETED? \_\_\_\_\_  
WAS OPERATION OF EQUIPMENT SATISFACTORY? \_\_\_\_\_  
WAS PERFORMANCE OF PERSONNEL SATISFACTORY? \_\_\_\_\_

X

Customer or His Agent

\_\_\_\_\_

Halliburton Operator

TAX

TAX

TAX

TOTAL

1153.50

CUSTOMER

## JOB LOG

TICKET NO.

413419

CUSTOMER

Columbus

PAGE NO.

1

JOB TYPE

Squeeze

DATE

11-21-71

FORM 2013

CHART NO.	TIME	RATE (OPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	400		3	1			1100	First Pump Log
		3	8	1		1450		Log Rate
		3	20.8			1500		Mix Gum
		3	10			1000		drop w/water
		1	15			1500		"
			20			1400		"
			21			1400		"
			21 1/2			1400		Stage
						1000		drop
			22			1400		Stage
			22 1/2			1400		Stage
						1000		drop
	455					1000		5 min Shut In
	500							Job Complete

CUSTOMER

NO. B 104997

FORM 1011 E-1

[illegible]

\* SACKS UNLESS OTHERWISE INDICATED

TOTAL	401	50
-------	-----	----

**CUSTOMER**

HALLIBURTON

A Division of Halliburton Company  
DUNSMuir, DELAWARE 19833

FORM 1908 R-1

WORK ORDER CONTRACT  
AND PRE-TREATMENT DATAATTACH TO  
INVOICE & TICKET NO.

413419

DISTRICT

DATE

11-21-71

TO: HALLIBURTON SERVICES

YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE

THE SAME AS AN INDEPENDENT CONTRACTOR TO:

AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

(CUSTOMER)

WELL NO.

LEASE

SEC.

TWP.

RANGE

FIELD

COUNTY

STATE

OWNED BY

## THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION  
NAME

TYPE

FORMATION  
THICKNESS

FROM

TO

PACKER: TYPE

SET AT

TOTAL DEPTH

MUD WEIGHT

BORE HOLE

INITIAL PROD:

OIL

BPD, H<sub>2</sub>O

BPD, GAS

MCF

PRESENT PROD:

OIL

BPD, H<sub>2</sub>O

BPD, GAS

MCF

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING						
LINER						
TUBING	2		2 1/2		3050	
OPEN HOLE						SHOTS/FT.
PERFORATIONS			3150			
PERFORATIONS						
PERFORATIONS						

PREVIOUS TREATMENT:

DATE

TYPE

MATERIALS

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ☐ ANNULUS ☐ CASING ☐ TUBING/ANNULUS ☐ HYDRAULIC HORSEPOWER ORDERED

CUSTOMER OR HIS AGENT STATES THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED

As consideration, the above-named Customer agrees:

- (a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists.
- (b) Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct or gross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.
- (c) Customer shall be responsible for and secure Halliburton against any liability for reservoir loss or damage, or property damage resulting from subsurface pressure; losing control of the well and/or a well blowout, unless such loss or damage is caused by the willful misconduct or gross negligence of Halliburton.
- (d) Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of subsurface trespass, or an action in the nature thereof, arising from a service operation performed by Halliburton hereunder.
- (e) Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.
- (f) Halliburton makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or service.
- (g) Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
- (h) Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Halliburton is unable to guarantee the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be responsible for any damages arising from the use of such information except where due to Halliburton's gross negligence or willful misconduct in the preparation or furnishing of it.
- (i) Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.
- (j) Upon Customer's default in the payment of Customer's account 60 days after receipt of invoice, such account will be subject to interest after date of invoicing until paid. In the event it becomes necessary to employ an attorney to enforce collection of such account, Customer agrees to pay all collection costs and attorney fees in the amount of 20 per cent of the amount of the unpaid account.
- (k) Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT  
THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED

CUSTOMER

DATE

11-21-71

TIME

4:00

A.M. P.M.

We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.

CUSTOMER



# HALLIBURTON SERVICES JOB SUMMARY

FORM 2012

HALLIBURTON  
DIVISION  
HALLIBURTON  
LOCATION

7-ENUCK  
9121106

BILLED ON  
TICKET NO.

413479

CUSTOMER

Polman has Corp

LEASE

Huber

WELL NO.

72

JOB TYPE

Squeeze

DATE

11-21-71

## WELL DATA

WELL NO. EP4 SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RNG. \_\_\_\_\_ COUNTY Rowlett STATE Mont.

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_

FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_

INITIAL PROD: OIL \_\_\_\_\_ BPD, WATER \_\_\_\_\_ BPD, GAS \_\_\_\_\_ MCFO

PRESENT PROD: OIL \_\_\_\_\_ BPD, WATER \_\_\_\_\_ BPD, GAS \_\_\_\_\_ MCFO

COMPLETION DATE \_\_\_\_\_ MUD TYPE \_\_\_\_\_ MUD WT. \_\_\_\_\_

PACKER TYPE \_\_\_\_\_ SET AT \_\_\_\_\_

OTTOM HOLE TEMP. \_\_\_\_\_ PRESSURE \_\_\_\_\_

WISC. DATA \_\_\_\_\_

## JOB DATA

CALLER OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>11-21</u>	DATE <u>11-21</u>	DATE <u>11-21</u>	DATE <u>11-21</u>
TIME <u>1100</u>	TIME <u>1530</u>	TIME <u>1600</u>	TIME <u>1700</u>

## PERSONNEL AND SERVICE UNITS

NAME	EMPL. NO.	UNIT NO. & TYPE	LOCATION
<u>Estes</u>		<u>7737</u>	<u>Glendon</u>
<u>Brown</u>		<u>580</u>	<u>Mont.</u>
<u>Scapple</u>		<u>7733</u>	<u>"</u>
		<u>BH</u>	

DEPARTMENT Cement

DESCRIPTION OF JOB Squeeze Plug

JOB DONE THRU: TUBING ☒ CASING ☐ ANNULUS ☐ TBG/ANN. ☐

CUSTOMER REPRESENTATIVE X Ted Jones

HALLIBURTON OPERATOR Estes COPIES REQUESTED \_\_\_\_\_

## CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
<u>1</u>	<u>100</u>	<u>Reg</u>	<u>6</u>	<u>PER</u>	<u>15K</u>		<u>118</u>	<u>15K</u>

## SUMMARY

### PRESSURES IN PSI

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_

BEAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_

VERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_

HUT-IN: INSTANT \_\_\_\_\_ 5-MIN. \_\_\_\_\_ 15-MIN. \_\_\_\_\_

HYDRAULIC HORSEPOWER

ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_

AVERAGE RATES IN BPM

### VOLUMES

PREFLUSH: BDL. GAL. \_\_\_\_\_ TYPE \_\_\_\_\_

LOAD & BKDN: BDL. GAL. \_\_\_\_\_ PAD: BDL. GAL. \_\_\_\_\_

TREATMENT: BDL. GAL. \_\_\_\_\_ DISPL: BDL. GAL. 22 1/2

CEMENT SLURRY: BDL. GAL. 20, 8

TOTAL VOLUME: BDL. GAL. \_\_\_\_\_

### REMARKS

REATING \_\_\_\_\_ DISPL. \_\_\_\_\_ OVERALL \_\_\_\_\_

CEMENT LEFT IN PIPE

SET 25 REASON Reg

CUSTOMER





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Prepared By	Initials	Date
Approved By		

WELL EQUIPMENT INVENTORY

Equipment	Make	Type, Size and/or Description	Number or Feet	Value
Pumping Unit				
Electric Motor or Engine				
Electrical Control (a)				
Tubing Head	Cameron	Series 900		C
Casing Head	Cameron	Series 900		C
Tubing		2-3/8" CS Hydril	2410	C
Rods				
Casing		7" 22# J-55	5778	NA
Flow Line (b)		2-7/8" EUEnd 2nd Tubing	1500	C
Treater		(See Huber #1 Sheet)		
Heater				
Separator				
Rank (c)		(See Huber #1 Sheet)		
Meters (d)				
Electrical System (e)				

Buildings and Miscellaneous: See Huber #1 Sheet

HUBER LEASE - 1 - 85 x 85 Lined overflow Pit (Fenced) - NU

1 - 12 x 12 Storage Building, Metal covered - NU

1 - 10 x 10 pump house building, Metal covered - NU

~~Huber #1 Sheet - See Huber #1 Sheet~~

754 Est. Salvage value: 3,000

- NOTES: (a) Including protective devices, time clock, etc.  
 (b) Including length, size and type. 15,700  
 (c) Including size, thickness, cone or flat bottomed, plain or galvanized.  
 (d) Gas or oil.  
 (e) If company owned, include transformers and equipment for electrical distribution system.

Lease & Well No.: Huber #2 Huber # 2

State: Montana

Field: Dart Riglar

County: Rosebud

